



STUDY TO DETERMINE AND IMPLEMENT STRATEGIES TO MINIMIZE OZONE NONATTAINMENT IMPLICATIONS BY CONTROLLING EMISSIONS FROM MOBILE SOURCES



Sean Bragan
PPM Consultants, Inc.



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DISCUSSION POINTS

Purpose and Need

Regulatory Background

Demonstration Installation

Probable Nonattainment Designations

Regulatory Drivers

DoD and Other Drivers

Study Overview/Deliverables

No Action Implications

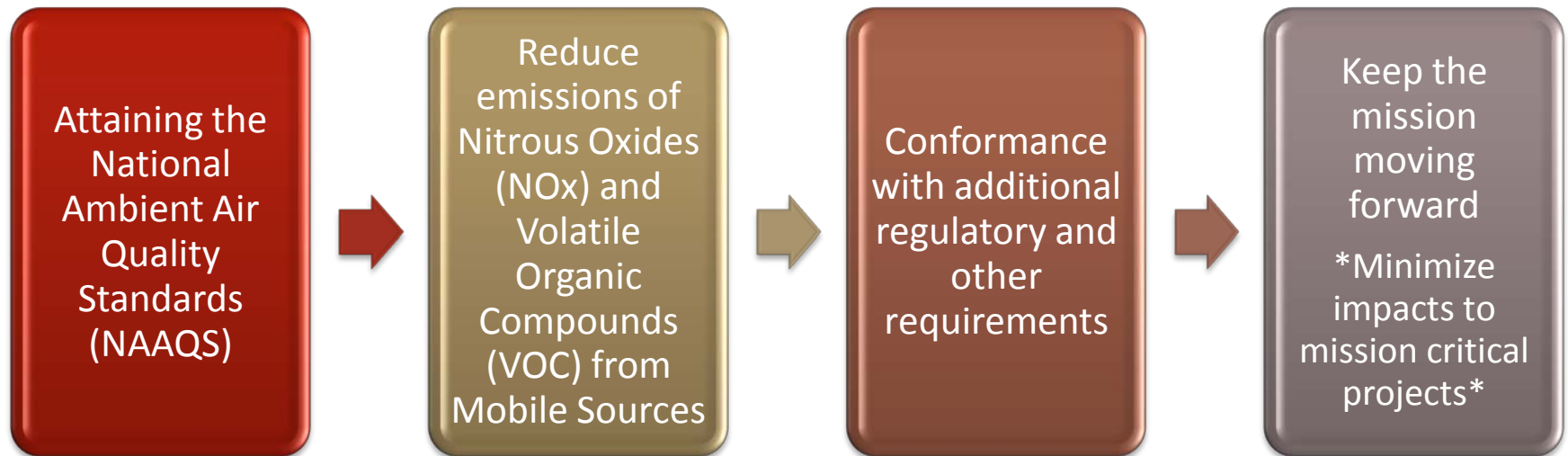
So What?

The Bigger Picture





PURPOSE AND NEED





REGULATORY BACKGROUND

National Ambient Air Quality Standards (NAAQS)

Standards set by EPA for 6 common (criteria) air pollutants as required by the Clean Air Act (CAA)

Ozone is primary criteria pollutant of concern for most areas facing nonattainment designation

Ozone is formed by the combination of NO_x and VOCs in the presence of sunlight

1997: Primary ozone standard set at 0.08 parts per million (ppm)

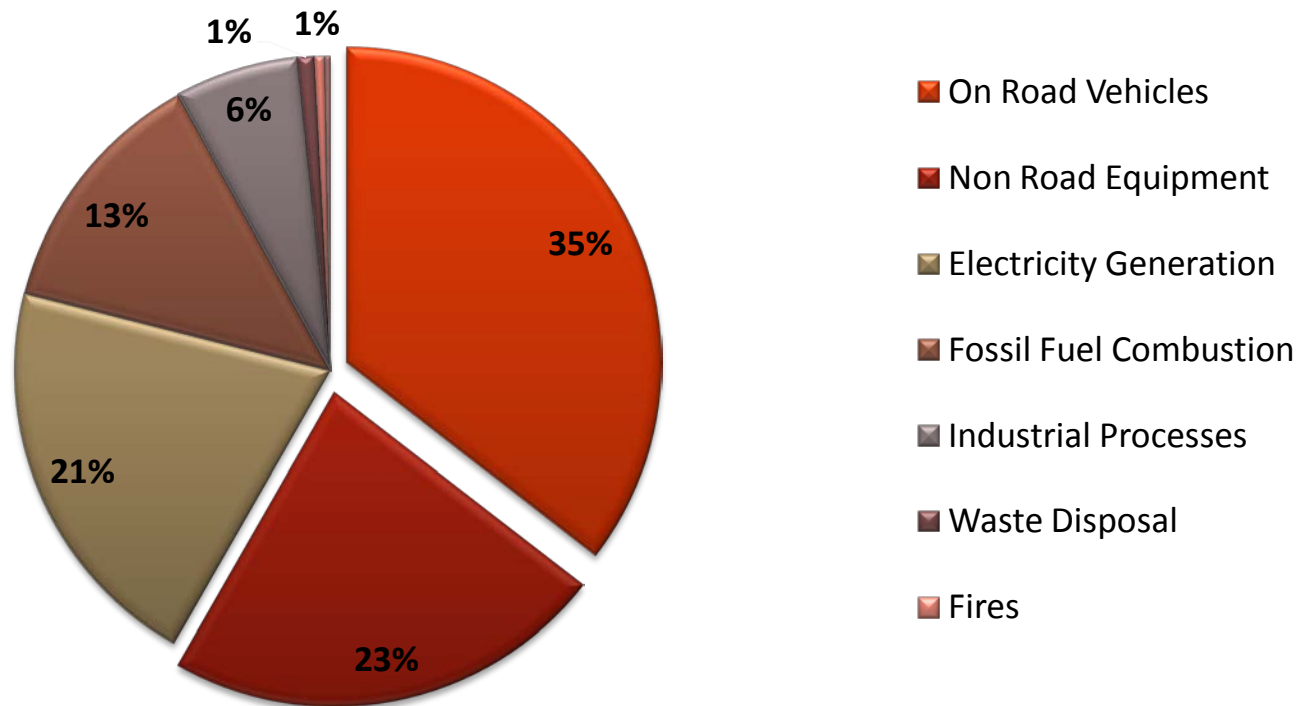
2008: EPA revised primary ozone standard to 0.075 ppm (Stayed)





REGULATORY BACKGROUND

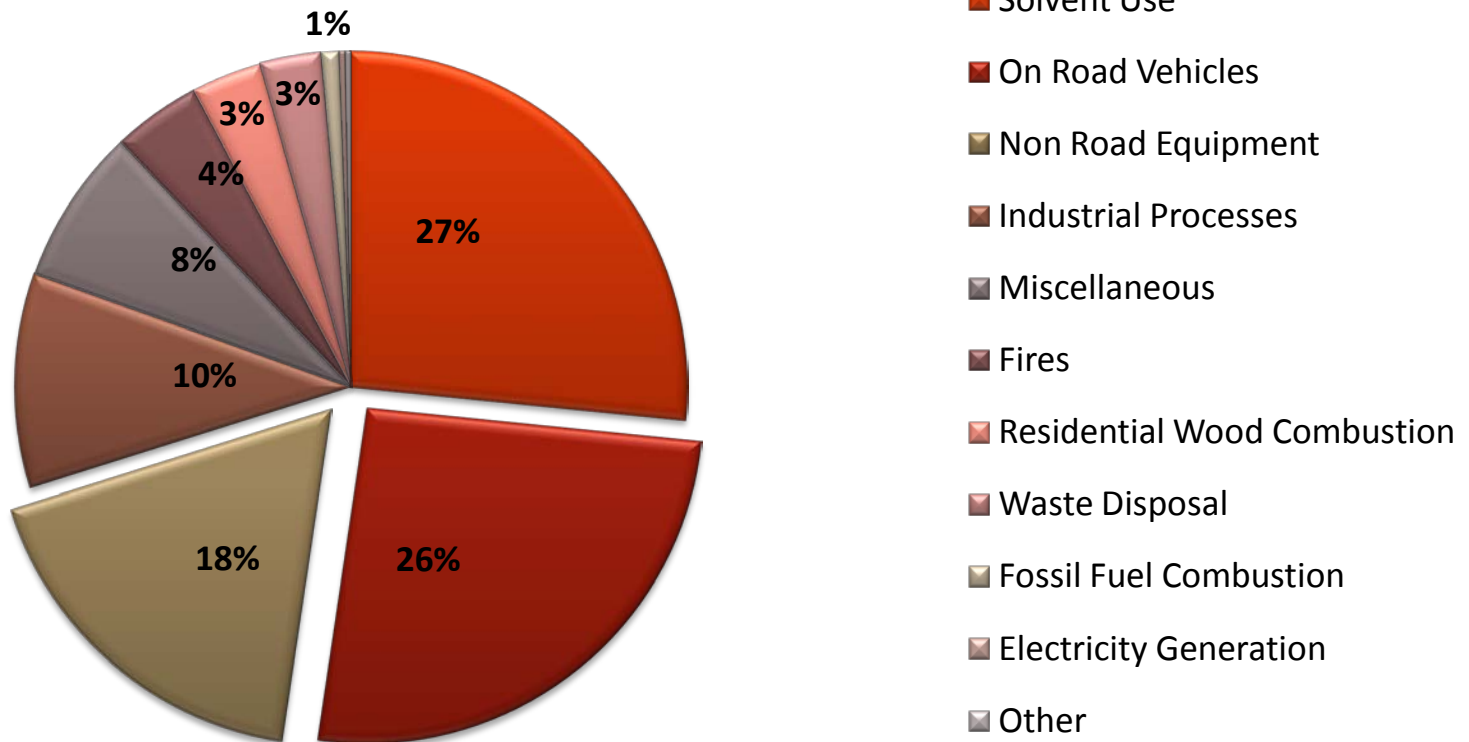
**National NOx Emissions By Source Sector
2005**





REGULATORY BACKGROUND

**National Volatile Organic Compounds Emissions by Source Sector
2005**





DEMONSTRATION INSTALLATION - FORT BENNING

Project Examples

Residential
Communities
Initiative

Improvements to
Training Ranges and
other Training Areas

Digital Multi-
Purpose Range
Complex

Consolidated
Maintenance
Facility

Range Control and
Maintenance
Complex

Training Barracks
Complex

Classrooms and
Dual Battalion
Dining Facilities

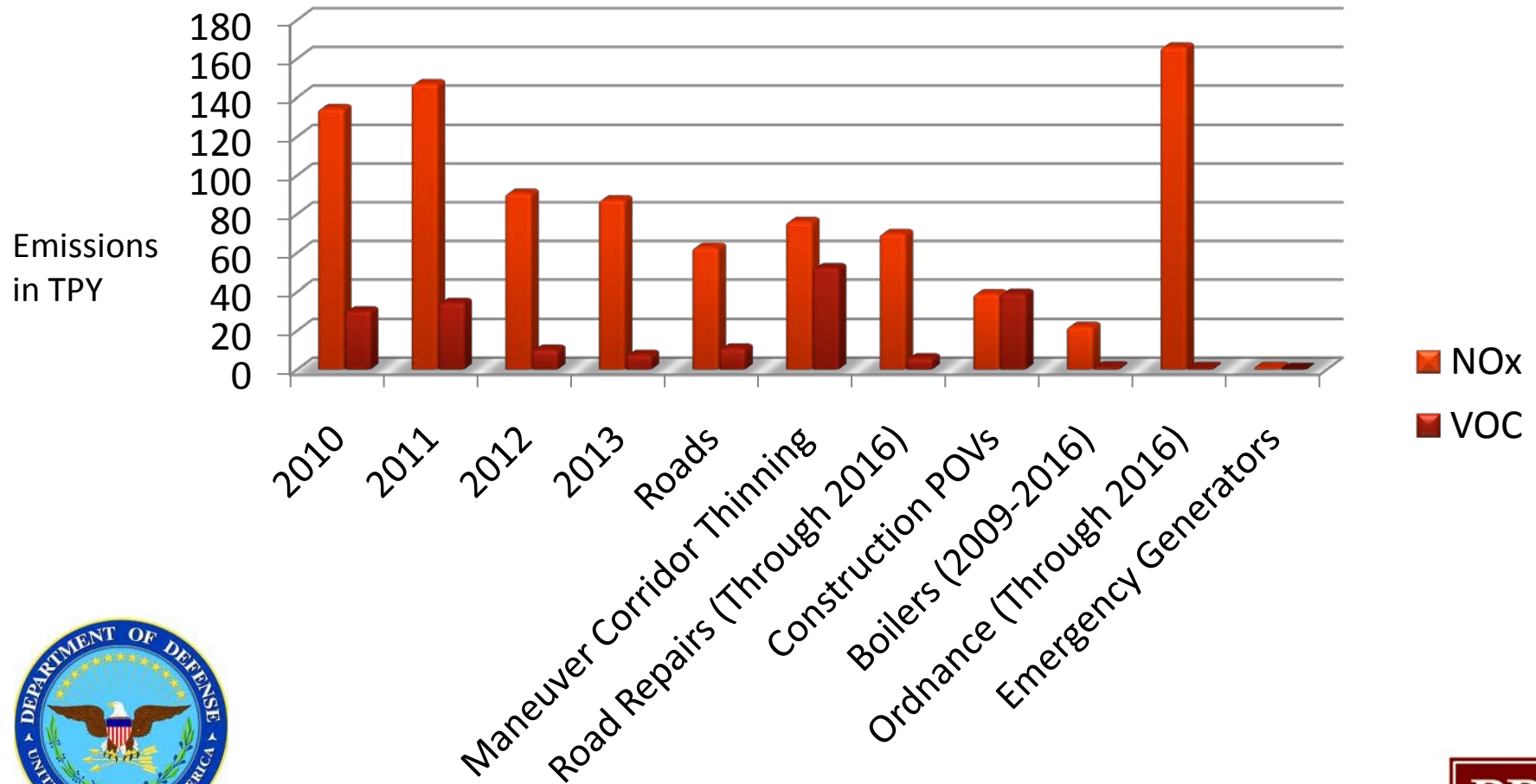
Chapel





DEMONSTRATION INSTALLATION

Fort Benning Construction Related Emissions Increases



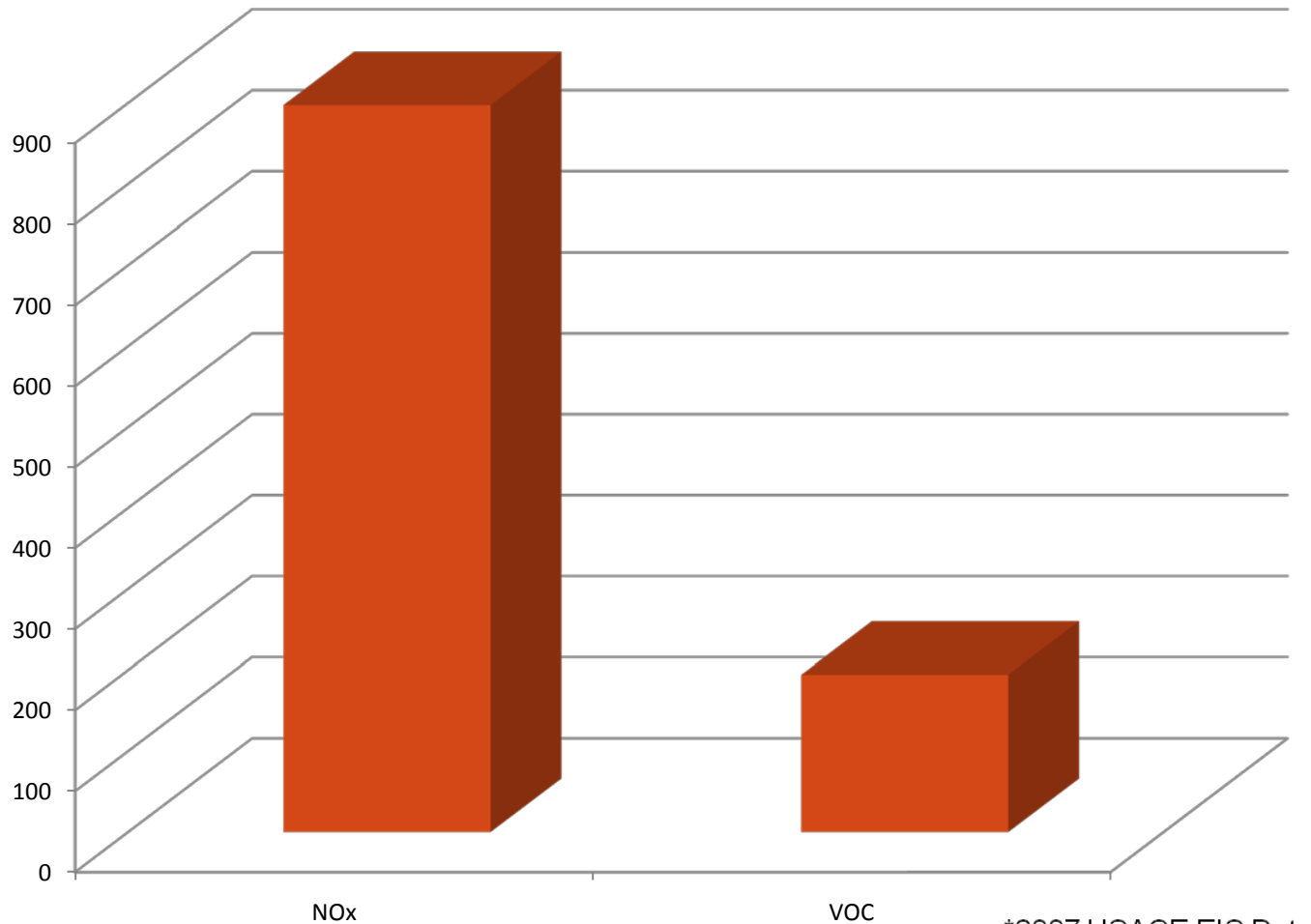
*2007 USACE EIS Data



DEMONSTRATION INSTALLATION

Fort Benning Construction Related Emissions Increases

Emissions
in TPY



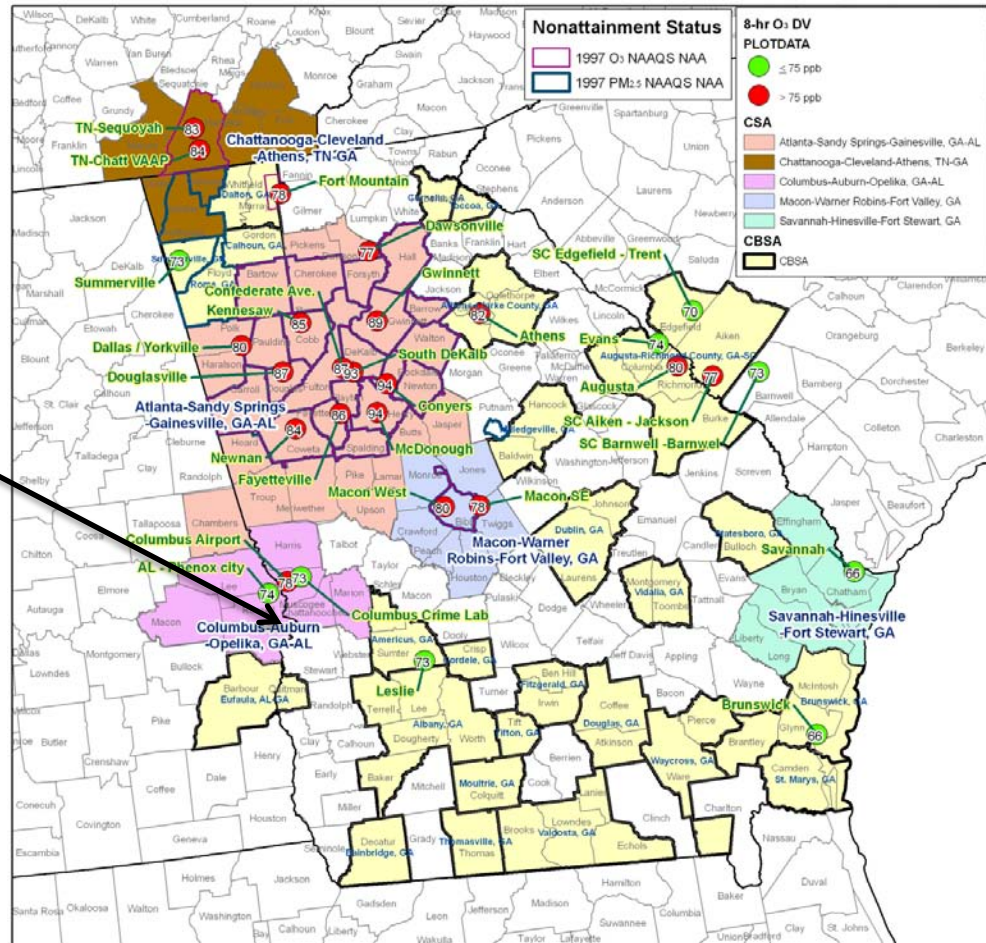
*2007 USACE EIS Data





PROBABLE NONATTAINMENT DESIGNATIONS - GEORGIA

Fort Benning

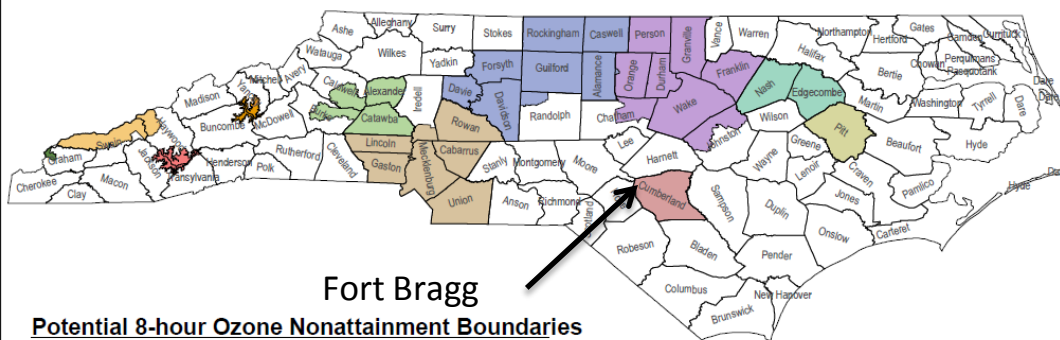


*Source: Georgia EPD



PROBABLE NONATTAINMENT DESIGNATIONS - NORTH CAROLINA

North Carolina's Recommendation On 8-Hour Ozone Nonattainment Area Boundaries



Fort Bragg

Potential 8-hour Ozone Nonattainment Boundaries

- Snow Bird Mountains (4000 feet & greater) - Joyce Kilmer-Slickrock Wilderness, Nonattainment
- Great Smoky Mountains National Park, Nonattainment
- Great Balsam Mountains (4000 feet & greater) - Shining Rock Wilderness Area, Nonattainment
- Black Mountains (4000 feet & greater), Nonattainment
- Hickory-Lenoir-Morganton, Nonattainment
- Charlotte-Gastonia-Salisbury, Nonattainment
- Greensboro-Winston-Salem-High Point, Nonattainment
- Raleigh-Durham-Cary, Nonattainment
- Fayetteville, Nonattainment
- Rocky Mount, Nonattainment
- Greenville, Unclassifiable

Map Drawn To Approximate Scale
North Is Represented As Up
Map Valid: 03-12-2009

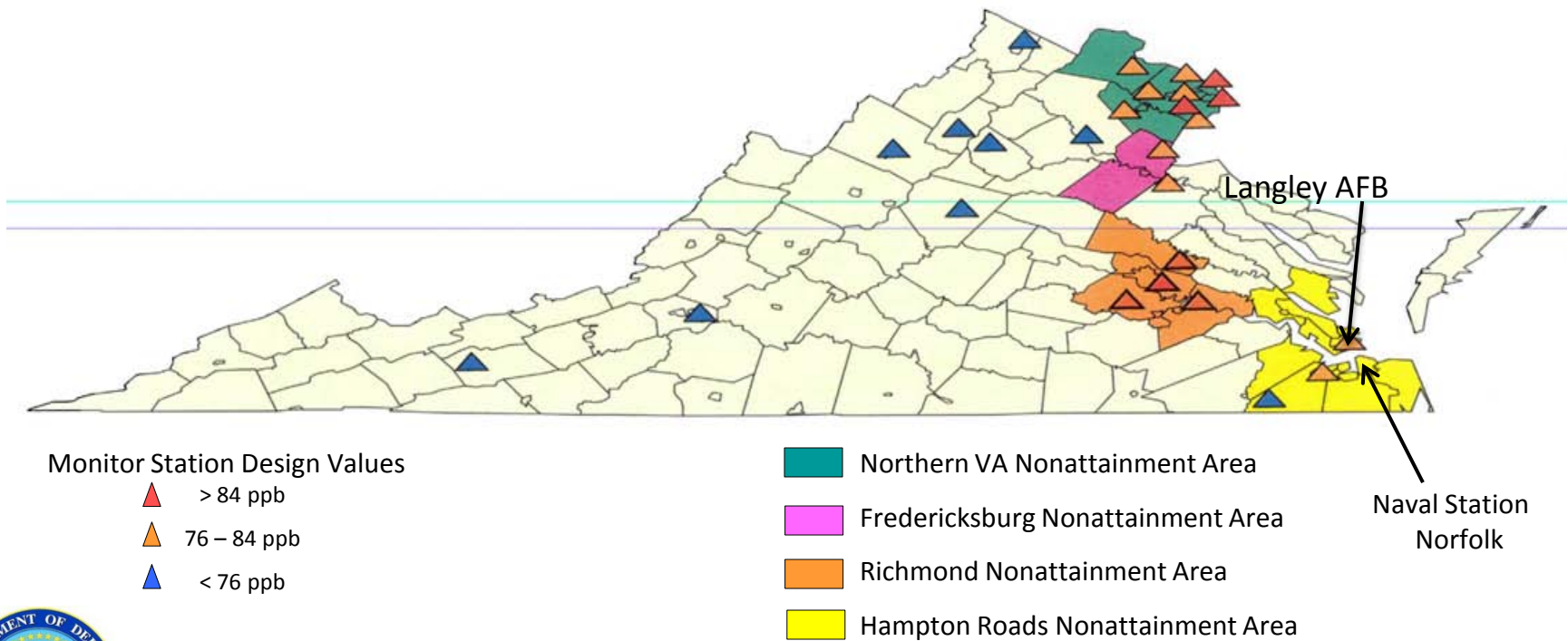


*Source: North Carolina DENR





PROBABLE NONATTAINMENT DESIGNATIONS - VIRGINIA



Monitor Station Design Values

- ▲ > 84 ppb
- ▲ 76 – 84 ppb
- ▲ < 76 ppb

- Northern VA Nonattainment Area
- Fredericksburg Nonattainment Area
- Richmond Nonattainment Area
- Hampton Roads Nonattainment Area

Langley AFB

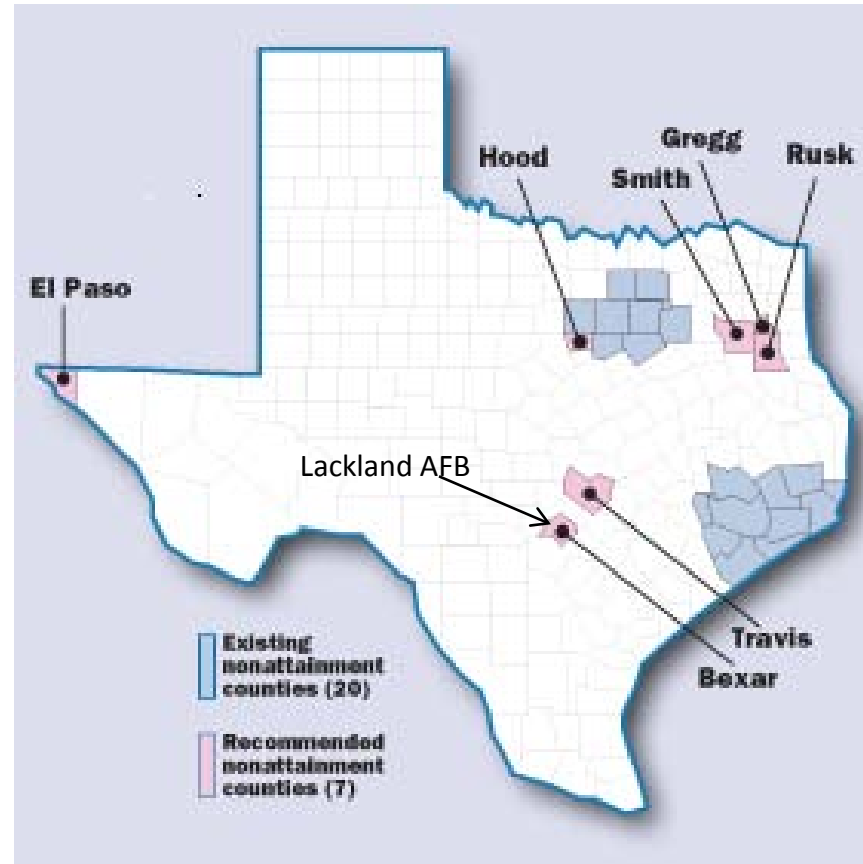
Naval Station Norfolk



*Source: Virginia DEQ






PROBABLE NONATTAINMENT DESIGNATIONS - TEXAS

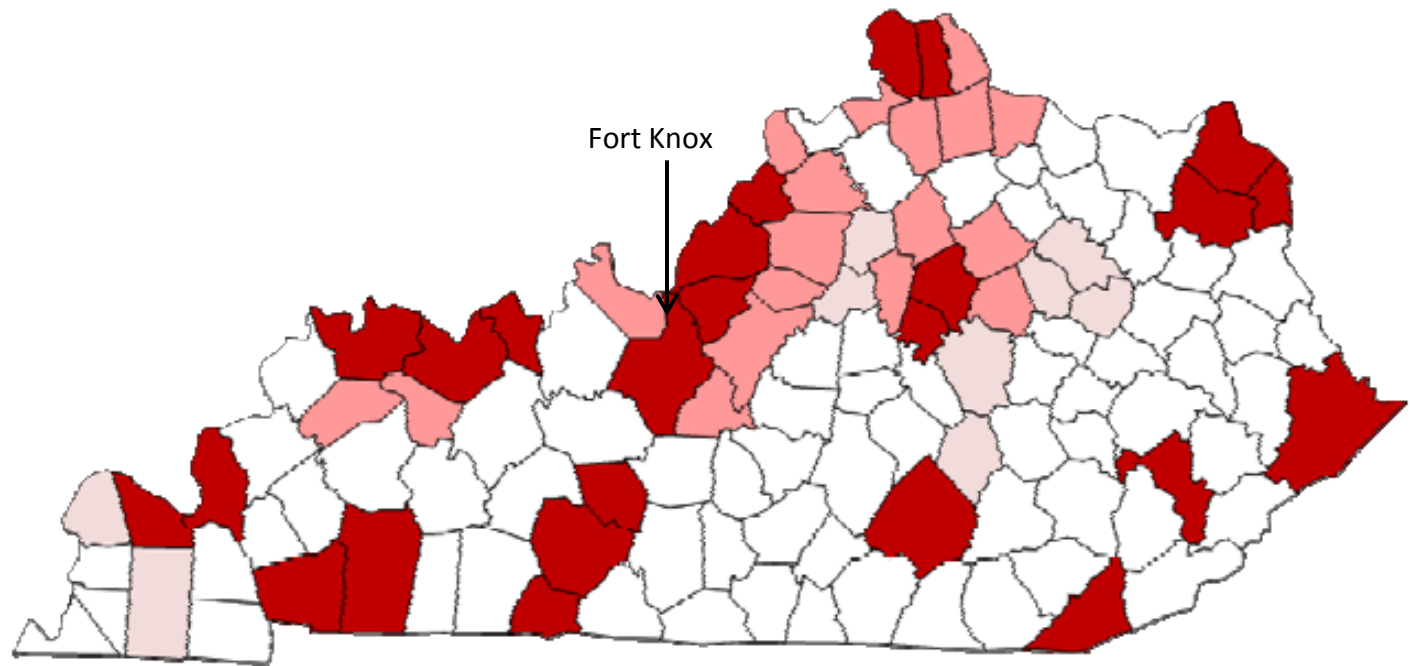


*Source: Texas CEQ



PROBABLE NONATTAINMENT DESIGNATIONS - KENTUCKY

	Violating monitors
	In MSA with violating monitors
	In CSA or Micropolitan SA with violating monitors



*Source: Kentucky DEP



REGULATORY DRIVERS

Implications of Nonattainment

Has the potential/ability to halt construction installation wide

Section 176(c) of the CAA prohibits Federal entities from taking actions in nonattainment areas which do not conform to the SIP

- Federal agencies are required to determine, prior to taking action, that such action, when taken, will conform to the SIP

Increased regulatory requirements for DoD Components

Increased regulatory based project delays





REGULATORY DRIVERS

State Implementation Plan (SIP)

Developed
pursuant to
CAA Section
110

Regulatory
requirements
identified in 40
CFR part 51

The State's plan
identifying how
that State will
attain/maintain
the NAAQS

Federally-
enforceable

Contains
criteria and
procedures for
assessing the
conformity of
Federal actions
consistent with
40 CFR parts 51,
subpart W, and
93, subpart B





REGULATORY DRIVERS

General Conformity

Required by CAA
Section 176(c)

Applies to all Federal actions that take place in nonattainment or maintenance areas

- Does not include Federal highway and transit projects developed, funded or approved under U.S.C. Title 23 or 49; or FHWA/FTA projects as defined in 40 CFR 93.101

Requires all Federal actions be consistent with the State's air quality goals

Allows for State to provide emissions budgets within the SIP for planned projects





REGULATORY DRIVERS

Transportation Conformity

Required by CAA
Section 176(c)

Applies to projects
funded under U.S.C.
Title 23 or 49 and
those which require
(to any degree)
FHWA or FTA
approval (40 CFR
93.101)

Submitted by the
State to the EPA
pursuant to 40 CFR
parts 51, subpart T,
and 93, subpart A

SIP revision contains
criteria and
procedures to assess
the regulatory
conformity of
transportation plans,
programs, and
projects

- Ensures that federally
supported transportation
actions are consistent
with that State's SIP

Actions not
consistent with the
SIP are not eligible to
receive Federal
funding





DOD AND OTHER DRIVERS (PARTIAL LIST)

National Environmental
Policy Act

Federal Agency Strategic
Sustainability Performance
Plans

Department of Defense, Base
Redevelopment and
Realignment Manual

Executive Order 12088

Executive Order 13327

Executive Order 13423

Executive Order 13514

DoD/DOE MOU

Air Force Instruction (AFI) 32-
7040, Air Quality Compliance
and Resource Management

Army Regulation (AR) 200-1,
Environmental Protection
and Enhancement

- BRAC05, Realignment & Transition
Actions, and Other Growth





STUDY DELIVERABLES

Technical
Report

Formal
Action Plan





TECHNICAL REPORT

General Overview

A discussion of the contribution of each mobile source category and the significance of each categories emissions

An analysis and discussion of ambient air quality data and its relationship with the current and proposed ambient air quality standards

Detailed analysis of the impacts of installation growth resulting from BRAC 2005 and Transformation Actions and other project growth





TECHNICAL REPORT





FORMAL ACTION PLAN

General Overview

An overview of the data acquisition and analysis

Analysis of potential impacts to ambient air quality from planned actions

Detailed discussions and strategies related to the implementation of available and viable options for reducing NOx and VOC emissions

Collaboration with surrounding cities and organizations





FORMAL ACTION PLAN





NO ACTION IMPLICATIONS

Increased
regulatory
requirements for
DoD Components

Increased
regulatory based
project delays

Potential to cause a
cessation of all
construction related
to air emissions
sources





SO WHAT?





THE BIGGER PICTURE

Achieve the
greatest level of
effort available
to reduce NOx
and VOC
emissions



Minimize
implications of
nonattainment
designation

MISSION
CRITICAL
PROJECTS
KEEP MOVING
FORWARD





Sean Bragan

Federal Coordinator

PPM Consultants, Inc.

Phone: 803-396-0801

Mobile: 803-318-1694

E-mail: sean.bragan@ppmco.com

Website: www.ppmco.com

